

Serial No. 10/641,996
Atty. Doc. No. A34482PCT-USA(071308.0207)
(1999P03046US01)

Amendments To The Specification:

In the Specification, please amend paragraph [0009] at page 5 line 12 to page 6 line 6, as follows:

[0009] Figure 1 shows an exemplary embodiment of a system for operating and monitoring automation systems 5 which have, for example, stored program controllers (SPS), numerical controllers (NC) and/or drives. The system has an operator control and monitoring system 1 (B&B client) which is connected to a fire wall computer 2 (= proxy) via an internal data network 6, for example the Ethernet. The operator control and monitoring system 1, which is also referred to below for short as B&B system 1, is assigned a local Intranet address which does not need to be known in the Internet. The fire wall of the fire wall computer 2 which surrounds the internal communications network 31 (= Intranet 31) of the fire wall server 3 is indicated using the line 9a, 9b in Figure 1. The Internet, the worldwide data communications network, is labeled with the reference symbol 10. The fire wall computer 2 can be connected via a connecting line 7, for example ISDN, to the Internet 10. The automation system 5 can be connected to the Internet 10 via an Internet server 4, which serves as a B&B server for the automation system 5 and which has the Internet address dcomserver.khe.siemens.de/, via a connecting line 8 and in each case a second fire wall computer 3. The second fire wall computer 3 surrounds the Intranet 32 assigned to the fire wall computer 3 and is visible on the Internet 10 at the Internet address khe.siemens.de.

In the Specification, please amend paragraph [0011] at page 7 lines 7-17, as follows:

[0011] Figure 2 shows a schematic, chronological representation of the bidirectional connection setup between a client 1 (B&B system) and an Internet Server 4 (IIS = Internet Information Server) of an automation system 5 (see Figure 1) using an Internet connection 6,7,8. In a first step, a first "get" request 20 (= connection request, back channel) initiated from the client 1 is made to the server 4. The server (4) replies in step 21 in the form of a response, to be

OAR_199903046US01.doc

2

Serial No. 10/641,996
Atty. Doc. No. A34482PCT-USA(071308.0207)
(1999P03046US01)

interpreted here as an acknowledgement. In the next step, a "post" request 22 (= connection request, forward channel) is sent from the client 1 to the server 4, which responds to this with a reply 23 as a response. The "get" channel is established before the post channel so that here even in the actual acknowledgement the server can transmit connection data to the client which are required for the setup of the second ("post") connection.

In the Specification, please amend paragraph [0012] at page 7 line 18 to page 8 line 3, as follows:

[0012] The principal bidirectional connection setup between client 1 and server 4 thus takes place in a two-stage request 20, 22 with respectively associated response 21, 23. In each case it is ensured that the data connections are maintained by virtue of the fact that dummy data 24, 25 are transmitted even during the absence of user data in order to maintain the transmission channels, and that information is transmitted to the B&B server 4, said information informing the B&B server 4 that there is still an intention to transmit user data

In the Specification, please amend paragraph [0014] at page 9 lines 5-19, as follows:

[0014] There is thus a user data communication 27 over the Internet in both directions independently in terms of timing, which user data communication 27 can be initiated by both sides. In this way, it becomes possible to use an existing communication path of the Internet for automation technology in a customary way for operator control and monitoring purposes as a HMI (Human Machine Interface). One possible advantageous application of this method is, for example, the operator control and monitoring system WinCC from Siemens. The system and method according to the invention permit DCOM orders to be transmitted from the client 1 to the Internet Server 4. This makes it possible for the Internet Server 4 to transmit DCOM events to its client **without** said client having a "real" address, i.e. one which is visible on the Internet. No additional costs are thus required on the client side because Internet browsers, like Internet Explorer from Microsoft or the Internet browser from Netscape, are available everywhere. No

OAR_199903046US01.doc

3

BEST AVAILABLE COPY

Serial No. 10/641,996
Atty. Doc. No. A34482PCT-USA(071308.0207)
(1999P03046US01)

particular special solutions are therefore necessary to exchange data between the automation system and the B&B user, for example for alarm issuing purposes. Dummy data 18, 19 are transmitted between the client 1 and the server 4.

OAR_199903046US01.doc

BEST AVAILABLE COPY